

10/643,697

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STRUCTURE FILE UPDATES: 29 NOV 2005 HIGHEST RN 868943-57-1
DICTIONARY FILE UPDATES: 29 NOV 2005 HIGHEST RN 868943-57-1

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

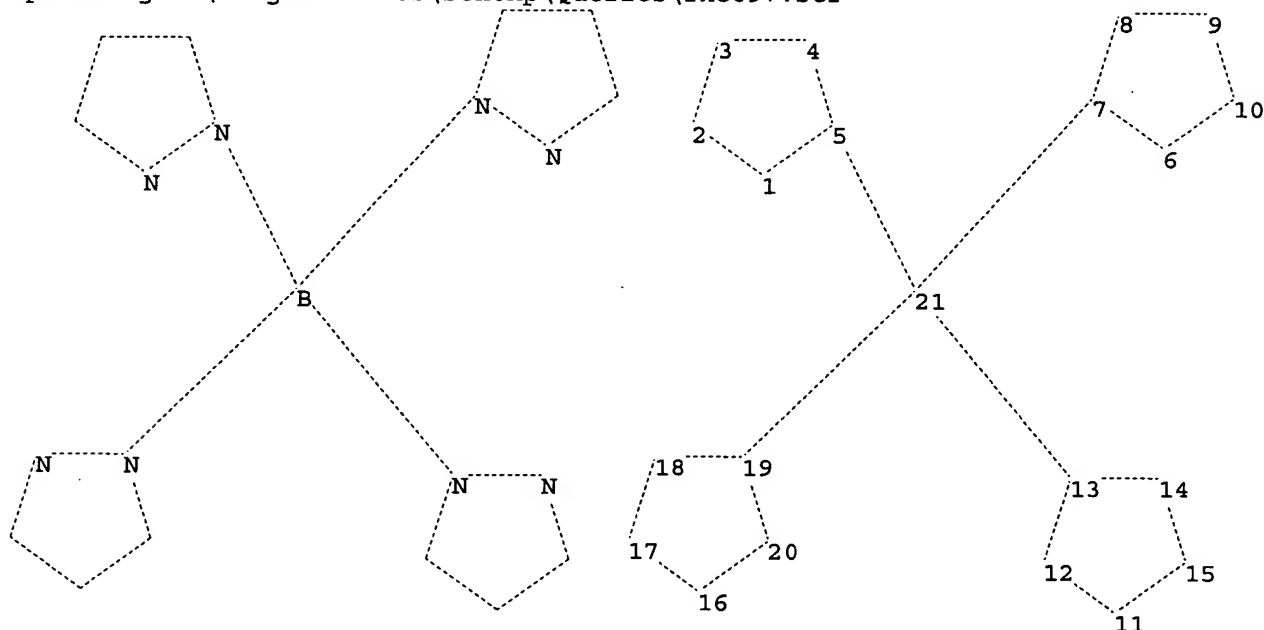
Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\rkc697.str



chain nodes :

21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

chain bonds :

5-21 7-21 13-21 19-21

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10 11-12 11-15 12-13 13-14
14-15 16-17 16-20 17-18 18-19 19-20

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 5-21 6-7 6-10 7-8 7-21 8-9 9-10 11-12 11-15 12-13
13-14 13-21 14-15 16-17 16-20 17-18 18-19 19-20 19-21

Match level :

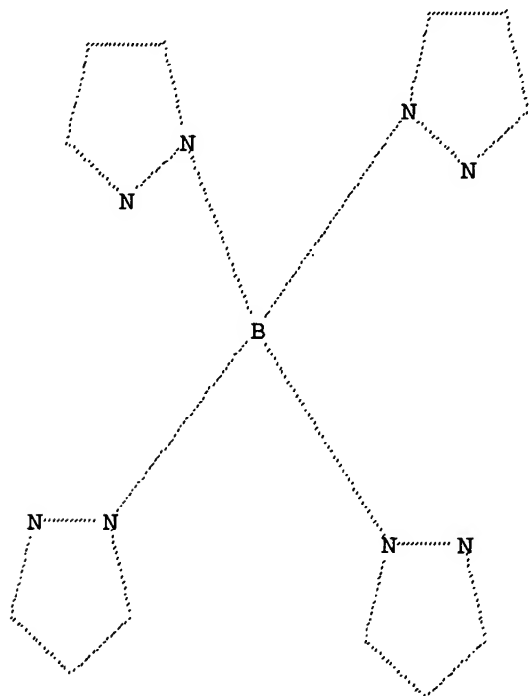
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 11:12:04 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1027 TO ITERATE

100.0% PROCESSED 1027 ITERATIONS

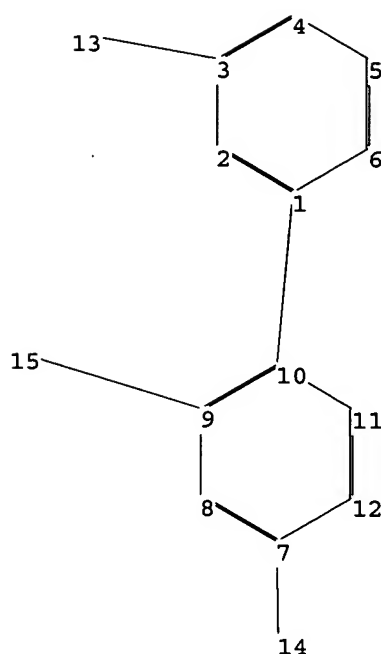
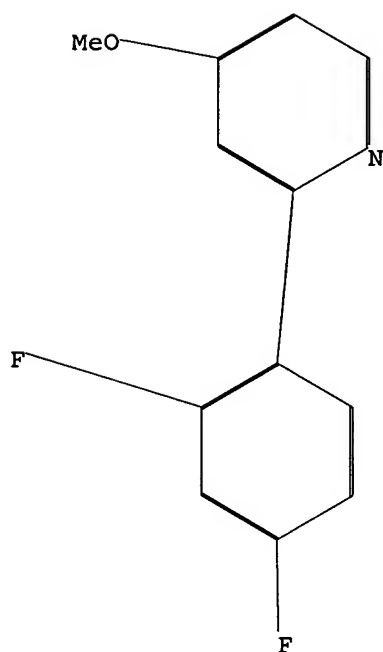
56 ANSWERS

SEARCH TIME: 00.00.01

L2 56 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\rkc6972.str



```

chain nodes :
13 14 15
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-10 3-13 7-14 9-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact bonds :
1-10 3-13 7-14 9-15
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

```

```

Connectivity :
6:4 M minimum RC ring/chain 11:4 M minimum RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS

```

L3 STRUCTURE UPLOADED

```

=> s 13 ful
FULL SEARCH INITIATED 11:13:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 362 TO ITERATE

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100.0% PROCESSED 362 ITERATIONS
SEARCH TIME: 00.00.01

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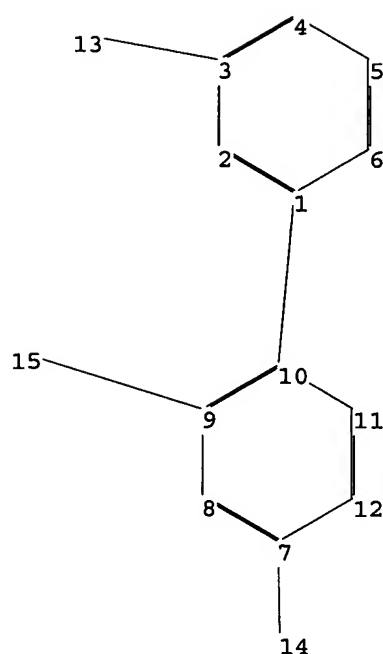
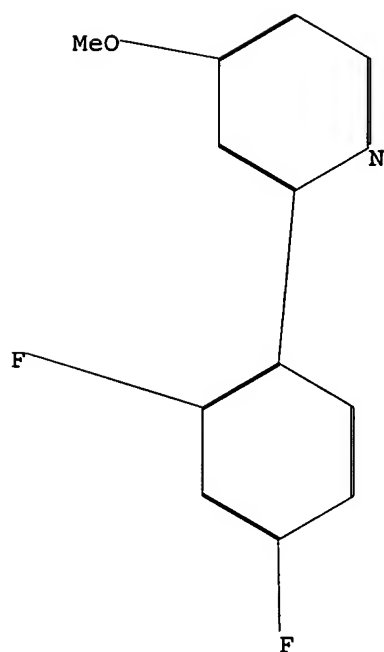
0 ANSWERS

L4 0 SEA SSS FUL L3

```

=>
Uploading C:\Program Files\Stnexp\Queries\rkc697c.str

```



```

chain nodes :
13 14 15
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-10 3-13 7-14 9-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact bonds :
1-10 3-13 7-14 9-15
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

```

```

Connectivity :
6:3 M minimum RC ring/chain 11:3 M minimum RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS

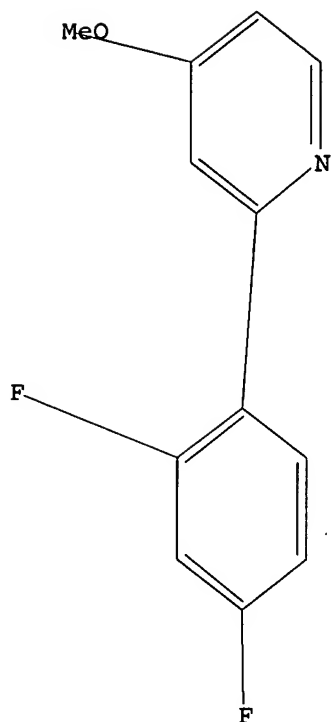
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L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15 ful

FULL SEARCH INITIATED 11:14:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 362 TO ITERATE

100.0% PROCESSED 362 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L6

0 SEA SSS FUL L5

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

485.28

485.49

FILE 'CAPLUS' ENTERED AT 11:14:36 ON 01 DEC 2005

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FILE COVERS 1907 - 1 Dec 2005 VOL 143 ISS 23

FILE LAST UPDATED: 30 Nov 2005 (20051130/ED)

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=> s 12

L7 138 L2

=> s 17 and iridium

38152 IRIDIUM

L8 4 L7 AND IRIDIUM

=> d 1-4 fbib abs fhitr

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1019964 CAPLUS

DN 142:13483

TI Organic phosphorescent material and organic optoelectronic device

IN Burn, Paul Leslie; Samuel, Ifor David William; Lo, Shih-Chun

PA Isis Innovation Limited, UK; The University Court of the University of St. Andrews

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

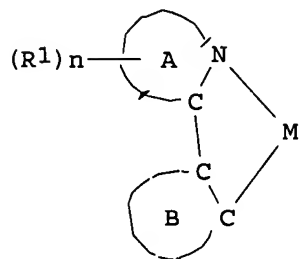
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004101707	A1	20041125	WO 2004-GB2127	20040517
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

GB 2003-11234

A 20030516

OS MARPAT 142:13483

GI

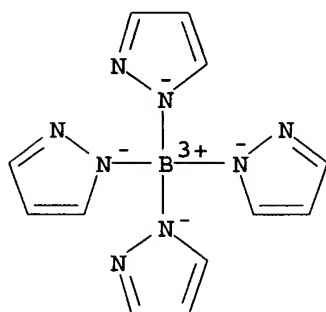


I

AB Cyclometallated complexes are described by the general formula I (M = d-block transition metal; A = five- or six-membered heteroaryl ring comprising at least 3 heteroatoms, preferably N atoms; B = five- or six-membered aryl or heteroaryl ring which is (un)substituted and

optionally fused to ≥ 1 other aryl or heteroaryl rings; R = group other than H, including dendrons or solubilizing groups; n = 0 or ≥ 1 ; and A and B are optionally fused or linked by ≥ 1 covalent bonds). Polymers incorporating the complexes (e.g., as pendent groups or within the main chain) are also described. Optoelectronic devices, and in particular organic light-emitting devices, are described which employ the compds. The light-emitting layers may addnl. comprise a diluent compound such as polymethyl methacrylate. The use of polymethyl methacrylate in an phosphorescent layer to increase quantum efficiency of an organic light-emitting device in which the phosphorescent layer is incorporated, and to improve film formation of an phosphorescent layer, is also described.

IT 14782-58-2, Potassium tetrakis(1-pyrazolyl)borate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (luminescent cyclometallated complexes and organic optoelectronic devices using them)
 RN 14782-58-2 CAPLUS
 CN Borate(1-), tetrakis(1H-pyrazolato- κ N1)-, potassium (9CI) (CA INDEX NAME)



● K⁺

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:162866 CAPLUS
 DN 140:225477
 TI Organometallic phosphorescent materials with anionic ligand and electroluminescent devices employing the phosphorescent materials
 IN Thompson, Mark E.; Djurovich, Peter I.; Li, Jian
 PA The University of Southern California, USA
 SO PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004017043	A2	20040226	WO 2003-US25936	20030818
	WO 2004017043	A3	20040624		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				

10/643,697

EAST

☒ Active

☒ L1: (1) cyclometall?

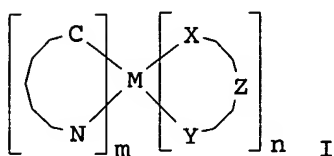
☒ L2: (2745) pyrazolyl and complexes

☒ L3: (30) 12 and phenylpyridine

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004102632	A1	20040527	US 2002-404087P	P	20020816
			US 2003-643697		20030818
			US 2002-404087P	P	20020816
EP 1539773	A2	20050615	EP 2003-788644		20030818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
			US 2002-404087P	P	20020816
			WO 2003-US25936	W	20030818
JP 2005535719	T2	20051124	JP 2004-529127		20030818
			US 2002-404087P	P	20020816
			WO 2003-US25936	W	20030818

OS MARPAT 140:225477
GI



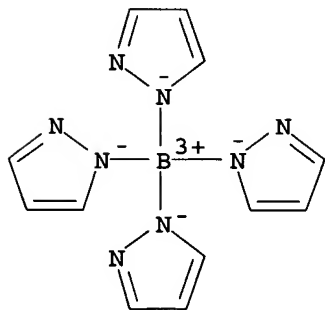
AB Emissive phosphorescent organometallic compds. that produce electroluminescence and organic light emitting devices employing such emissive phosphorescent organometallic compds. are provided, where the organometallic compds. are described by the general formula (I), where M is a metal with an atomic weight > 40, the part to the left of M is a cyclometallated ligand, the part to the right of M is anionic; X and Y are each an independently selected heteroatom-containing group or heterocycle, Z is a divalent linker, m and n are integers selected from 1 and 2 where the sum of n + m is 2 or 3. More specifically the present invention is directed to novel primarily non-emitting ligands which produce a blue shift in emitted light when associated with a cyclometallated ligand.

IT 14782-58-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(organometallic phosphorescent materials with anionic ligand and electroluminescent devices employing phosphorescent materials)

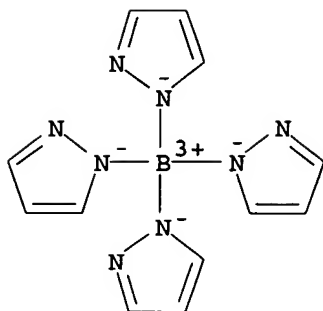
RN 14782-58-2 CAPLUS

CN Borate(1-), tetrakis(1H-pyrazolato-κN1)-, potassium (9CI) (CA INDEX NAME)



● K⁺

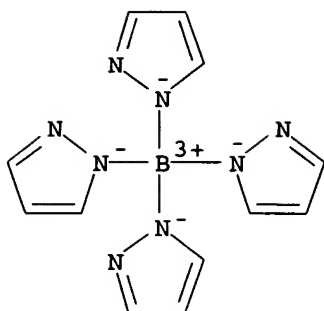
L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:86143 CAPLUS
 DN 141:71685
 TI Synthesis and characterization of cyclometalated Ir(III) complexes with
 pyrazolyl ancillary ligands
 AU Li, Jian; Djurovich, Peter I.; Alleyne, Bert D.; Tsyba, Irina; Ho, Nam N.;
 Bau, Robert; Thompson, Mark E.
 CS Department of Chemistry, University of Southern California, Los Angeles,
 CA, 90089-0744, USA
 SO Polyhedron (2004), 23(2-3), 419-428
 CODEN: PLYHDE; ISSN: 0277-5387
 PB Elsevier
 DT Journal
 LA English
 OS CASREACT 141:71685
 AB The syntheses and structures of a series of (N,C2'-(2-para-
 tolylpyridine))2Ir(LX) [(tpy)2Ir(LX)] and (N,C2'-(4',6'-
 difluorophenylpyridine))2Ir(LX) [(dfppy)2Ir(LX)] are reported, where LX
 are pyrazolyl and pyrazolyl-borate ligands. Reaction of the
 dichloro-bridged dimer [(tpy)2Ir(μ -Cl)]2 with excess pyrazolyl-borate
 ligands forms a protonated-dipyrazolyl Ir complex, (tpy)2Ir(pz2H). The Ir
 bound chloride in [(tpy)2Ir(μ -Cl)]2 presumably facilitates the
 hydrolysis of pyrazolyl-borate. Thus, the syntheses of Ir complexes with
 bis(pyrazolyl)borates, e.g., (tpy)2Ir(pz2Bpz2) and (tpy)2Ir(pz2BEt2)
 require the chloride abstraction by CF3SO3Ag before pyrazolyl-borate is
 added to the reaction solution (tpy)2Ir(pz2H), (tpy)2Ir(pzH)2(CF3SO3),
 (tpy)2Ir(pz2Bpz2) and (tpy)2Ir(pz2BEt2) have been structurally
 characterized by x-ray crystallog. The two pyrazolyl rings of
 (tpy)2Ir(pz2H) are nearly coplanar (dihedral angle, 12°), due to
 the presence of N-H...N hydrogen bond
 (N...N distance of 2.56 Å), while the two
 pyrazolyl rings of (tpy)2Ir(pzH)2(CF3SO3) are not coplanar (pz-pz dihedral
 angle, 47°). Unlike other η^2 -pyrazolyl-borate complexes, the
 (tpy)2Ir(pz2BEt2) exhibits a rare quasi-chair conformation adopted by the
 ring, rather than the more common boat conformations which have been observed
 previously. Similarly, the cycle of (tpy)2Ir(pz2Bpz2) adopts a half-chair
 conformation, more flattened than the typical boat conformation. While
 the choice of pyrazolyl-borate ligand does not change the structural
 properties of the "(tpy)2Ir" fragment, it markedly affects the photophys.
 properties of both (tpy)2Ir(pz2BR2) and (dfppy)2Ir(pz2BR2) complexes. The
 pyrazolyl-borate ancillary ligands affect the absorption and emission
 energies of these complexes by tuning the HOMO energies. The
 electron-withdrawing ancillary ligands, e.g., pz2Bpz2-, decrease the
 electron d. on the **iridium**, stabilizing the metal-centered
 HOMOs.
 IT 14782-58-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (synthesis and characterization of cyclometalated phenylpyridinato
iridium complexes with pyrazolylborato ancillary ligands)
 RN 14782-58-2 CAPLUS
 CN Borate(1-), tetrakis(1H-pyrazolato- κ N1)-, potassium (9CI) (CA INDEX
 NAME)



● K⁺

RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:6712 CAPLUS
DN 116:6712
TI Poly(1-pyrazolyl)boratoiridium and tris(1-pyrazolylmethyl)aminoiridium and
-rhodium complexes
AU Fernandez, Maria J.; Rodriguez, Maria J.; Oro, Luis A.
CS Inst. Cienc. Mater. Aragon, Univ. Zaragoza, Zaragoza, 50009, Spain
SO Polyhedron (1991), 10(14), 1595-8
CODEN: PLYHDE; ISSN: 0277-5387
DT Journal
LA English
OS CASREACT 116:6712
AB The synthesis of the Ir(HnBPz_{4-n})(cod) (n = 2, 0; Pz = pyrazolyl; cod =
1,5-cyclooctadiene) complexes is described. They are prepared by reaction
of [Ir(μ-Cl)(cod)]₂ with Tl(HnBPz_{4-n}). The carbonyl compds.
Ir(HnBPz_{4-n})(CO)₂ (n = 2, 0) are obtained by carbonylation of the
1,5-cyclooctadiene derivs. The prepns. of the [Ir(coe)₂{N(CH₂Pz)₃}]BF₄
(coe = cyclooctene) and [M(cod){N(CH₂Pz)₂}]BF₄ (M = Ir, Rh) compds. are
also reported. They are prepared by treatment of [Ir(μ-Cl)(coe)₂]₂ or
[M(μ-Cl)(cod)]₂ with N(CH₂Pz)₃ and NaBF₄. The carbonyl compound
[Rh(CO)₂{N(CH₂Pz)₃}]BF₄ is obtained by carbonylation of
[Rh(cod){N(CH₂Pz)₃}]BF₄.
IT 137755-63-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with cyclooctadieneiridium chloride complex)
RN 137755-63-6 CAPLUS
CN Borate(1-), tetrakis(1H-pyrazolato-κN1)-, thallium(1+) (9CI) (CA
INDEX NAME)



● Tl (I) +

=> FIL STNGUIDE
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
24.80	510.29

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-2.92	-2.92

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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Nov 23, 2005 (20051123/UP).

=>

=>
Executing the logoff script...

=> LOG H

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.48	510.77

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-2.92

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:23:13 ON 01 DEC 2005
Connection closed by remote host
END

Unable to generate the STN prompt.
Exiting the script...

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptaul29rc

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

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AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005.
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:34:39 ON 01 DEC 2005

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

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=> s cyclometall?

L1 341 CYCLOMETALL?

=> s l1 and pyrazole

20280 PYRAZOLE

L2 5 L1 AND PYRAZOLE

=> d 1-5 fbib abs fhitr

L2 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:331829 CAPLUS

DN 143:43957

TI Novel **cyclometallated** Pd(II) and Pt(II) complexes with indole derivatives and their use as catalysts in Heck reaction

AU Cravotto, Giancarlo; Demartin, Francesco; Palmisano, Giovanni; Penoni, Andrea; Radice, Tiziano; Tollari, Stefano

CS Dipartimento di Scienza e Tecnologia del Farmaco, Universita degli Studi di Torino, Turin, 10125, Italy

SO Journal of Organometallic Chemistry (2005), 690(8), 2017-2026

CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier B.V.

DT Journal

LA English

AB Several palladacycle and platinacycle complexes were prepared from easily available or naturally occurring indole derivs., such as gramine and related compds. Dimeric complexes were obtained with Pd(OAc)₂, while Pt(DMSO)₂Cl₂ mainly afforded monomeric structures. A notable feature of these reactions was the formation of new M-C bonds between Pd or Pt and C-2 and C-3 of the indole ring. With ligands like 2-(2'-pyridyl)-1H-indoles, N-N metallacycles were generated instead: in fact new C-M bonds with the C-3 position could only form if N-substituted indoles were used. The reactivity of Pd dimeric complexes with PPh₃, sym-collidine and DMAP was explored to obtain monomeric complexes. Three such compds. were prepared, one of which was characterized by x-ray diffraction. Metathetical reactions were carried out to effect a ligand exchange replacing OAc with halide ions, with the aim to synthesize μ -Cl and μ -Br bridged structures. Turning to the synthesis of hetaryl complexes, functionalization of the C-2 position on the indole ring was achieved. These complexes were prepared by substitution reactions starting from gramine and/or its alkylammonium salts.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

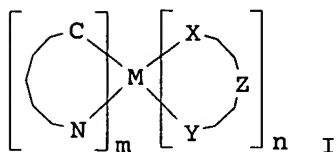
L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:162866 CAPLUS

DN 140:225477
 TI Organometallic phosphorescent materials with anionic ligand and electroluminescent devices employing the phosphorescent materials
 IN Thompson, Mark E.; Djurovich, Peter I.; Li, Jian
 PA The University of Southern California, USA
 SO PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004017043	A2	20040226	WO 2003-US25936	20030818
	WO 2004017043	A3	20040624		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004102632	A1	20040527	US 2002-404087P	P 20020816
				US 2003-643697	20030818
				US 2002-404087P	P 20020816
	EP 1539773	A2	20050615	EP 2003-788644	20030818
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
				US 2002-404087P	P 20020816
				WO 2003-US25936	W 20030818
	JP 2005535719	T2	20051124	JP 2004-529127	20030818
				US 2002-404087P	P 20020816
				WO 2003-US25936	W 20030818

OS MARPAT 140:225477
 GI



AB Emissive phosphorescent organometallic compds. that produce electroluminescence and organic light emitting devices employing such emissive phosphorescent organometallic compds. are provided, where the organometallic compds. are described by the general formula (I), where M is a metal with an atomic weight > 40, the part to the left of M is a cyclometallated ligand, the part to the right of M is anionic; X and Y are each an independently selected heteroatom-containing group or heterocycle, Z is a divalent linker, m and n are integers selected from 1 and 2 where the sum of n + m is 2 or 3. More specifically the present invention is directed to novel primarily non-emitting ligands which produce a blue shift in emitted light when associated with a cyclometallated ligand.

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:608234 CAPLUS
 DN 115:208234
 TI Organodipalladium(II) cyclometallates of the Schiff base

N,N'-diethyl-2,6-dialdiminobenzene
 AU Chakladar, Sukla; Paul, Parimal; Nag, Kamalaksha
 CS Dep. Inorg. Chem., Indian Assoc. Cultiv. Sci., Calcutta, 700 032, India
 SO Polyhedron (1991), 10(13), 1513-19
 CODEN: PLYHDE; ISSN: 0277-5387
 DT Journal
 LA English
 OS CASREACT 115:208234
 AB Syntheses and reactions of dipalladiobenzene derivs. are reported. Li₂[PdCl₄] reacts with N,N'-diethyl-2,6-dialdiminobenzene (H₂L) to form the cyclometalated compound, [Pd₄L₂Cl₄], in which metalation occurs at the 3,5-carbon atoms of the aromatic ring. The tetrachloro compound can be converted to a dinuclear precursor complex, [Pd₂L(MeCN)₂(ClO₄)₂], which reacts with pyridine, 4-methylpyridine, **pyrazole** and imidazole (B) to produce complexes of the type [Pd₂L(B)₄](ClO₄)₂, and with 2,2'-bipyridine to produce [Pd₂L(bpy)₂](ClO₄)₂. A tetranuclear neutral complex [Pd₄L₂(pz)₄] is formed when the precursor complex interacts with **pyrazole** and Et₃Me. A series of neutral chelate compds. [Pd₂L(AB)₂] was obtained by treating the precursor with sodium salts of acetylacetone, ethylacetoacetate, N-methylsalicylaldehyde and N,N'-dimethyldithiocarbamic acid. The compds. were characterized from their ¹H NMR spectra.

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:552700 CAPLUS
 DN 113:152700
 TI Cyclometalation of polydentate ligands containing **pyrazole** groups, including the synthesis of platinum(IV) complexes with tripodal [N-C-N]- ligand systems
 AU Canty, Allan J.; Honeyman, R. Thomas
 CS Chem. Dep., Univ. Tasmania, Hobart, 7001, Australia
 SO Journal of Organometallic Chemistry (1990), 387(2), 247-63
 CODEN: JORCAI; ISSN: 0022-328X
 DT Journal
 LA English
 OS CASREACT 113:152700
 AB Dimethylplatinum(II) complexes, PtR₂(L), have been made by reaction of [PtR₂(μ-SEt₂)]₂ with a range of polydentate N donor ligands containing one or more pyrazol-1-yl (pz) donor groups, including the new ligand bis(pyrazol-1-yl)(thien-2-yl)methane. The complexes give cis-PtMe₂(py)₂ when dissolved in pyridine at ambient temperature, except for PtMe₂(L) [L = (pz)₂CH₂, (pz)₂C(H)Ph, (pz)₃CH, (pz)₂(mim)CH (mim = N-methylimidazol-2-yl)], which undergo cyclometalation at a C(5) position of one pyrazol-1-yl ring. The **cyclometallated** ligands have been examined as isoelectronic analogs. of N donor poly(pyrazol-1-yl)alkane and poly(pyrazol-1-yl)borate ligands. A CO derivative, PtMe{(pz)₂(C₃H₂N₂)CH-N,C}(CO) and a series of phosphine complexes have been prepared. The complex PtMe{(pz)₂(C₃H₂N₂)CH-N,C}(py) and polymeric [PtMe{(pz)₂(C₃H₂N₂)CH}]_n undergo oxidative addition reactions with organic halides to give the platinum(IV) complexes [fac-PtMe(R){(pz)₂(C₃H₂N₂)CH-N,N',C}(py)]X and fac-PtXMe(R){(pz)₂(C₃H₂N₂)CH-N,N',C} (I), resp. The new reagent 1-bromo-2-(pyrazol-1-yl)ethane forms [fac-PtMe{(pz)₂(C₃H₂N₂)CH-N,N',C}(pzCH₂CH₂-N,C)]Br, containing both [N-C-N]- and [N-C]-ligands. Reaction of MeI or PhCH₂Br with PtMe₂{(pz)₃CH} gives I directly, and PtMe₂{(pz)₄C} undergoes a similar cyclometalation/oxidative addition in MeI to form fac-PtI₂Me₂{(pz)₃(C₃H₂N₂)CH-N,N',c}.

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:579265 CAPLUS
 DN 83:179265
 TI **Cyclometallation** reactions. XIII. Reactions of phenyl-substituted heterocyclic nitrogen-donor ligands
 AU Bruce, Michael I.; Goodall, Brian L.; Matsuda, Isamu
 CS Dep. Inorg. Chem., Univ. Bristol, Bristol, UK
 SO Australian Journal of Chemistry (1975), 28(6), 1259-64

CODEN: AJCHAS; ISSN: 0004-9425

DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB The preparation of metalated complexes of Mn or Re derived from 2-phenylpyridine, 1,4-diphenylquinoxaline, 1-phenylpyrazole, 4-phenylpyrimidine, 1,4-diphenylphthalazine and 2,5-diphenyloxazole is described. Thus, heating 2-phenylpyridine with MnMe(CO)₅ gave I.

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	ENTRY	SESSION
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